#### **CALIFORNIA ENERGY COMMISSION**

1516 Ninth Street Sacramento, California 95814 Main website: www.energy.ca.gov



In the matter of,
Informational Proceeding and
Preparation of the 2005 Integrated
Energy Policy Report
(2005 Energy Report)

Docket No. 04-IEP-01
NOTICE OF COMMITTEE
WORKSHOP ON ENVIRONMENTAL
PERFORMANCE REPORT SCOPING
AND DATA COLLECTION

### NOTICE OF COMMITTEE WORKSHOP ON SCOPING AND DATA COLLECTION FOR THE ELECTRICITY ENVIRONMENTAL PERFORMANCE REPORT

The California Energy Commission's 2005 Integrated Energy Policy Report Committee (Committee) will conduct a workshop to seek public scoping comments on the staff's proposal for the 2005 Energy Report relating to the Environmental Performance Report of California's Electrical Generation Facilities. Commissioner John L. Geesman is the Presiding Member of the Committee, and Commissioner James D. Boyd is the Associate Member.

The workshop will be held:

#### **MONDAY, NOVEMBER 15, 2004**

9:00 a.m.
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
Hearing Room A
Sacramento, California
(Wheelchair Accessible)

Audio from this workshop will be broadcast over the Internet. Please go to: <a href="https://www.energy.ca.gov/webcast">www.energy.ca.gov/webcast</a>

This workshop will be one of a series of public scoping meetings by the Committee to discuss staff proposals for topics to be analyzed in the *2005 Energy Report*. The purpose of this workshop is to provide a forum for public discussion with agencies, industry participants, and other interested stakeholders concerning the policy issues and questions to be addressed in the *2005 Environmental Performance Report*. This discussion will encompass methods, analytic approaches, and data requirements, including the staff's proposal for a series of environmental data requests to energy producers.

Note: California Energy Commission's formal name is State of California Energy Resources Conservation and Development Commission.

#### **Background**

As required by statute, the Energy Commission adopted its first *Integrated Energy Policy Report* (2003 Energy Report) in November 2003 and submitted it the Governor and Legislature. The report provided an integrated assessment of the state's major energy systems, along with recommendations to balance broad public interests, protect the environment, ensure reliable and secure energy supplies, and protect public health and safety.

As a critical input to the 2005 Energy Report, the Environmental Performance Report will systematically assess the environmental footprint, impacts, and trends of the state's power generation and transmission system. California's large and diverse generation system totals nearly 60,000 MW, and includes natural gas, nuclear, hydro, coal and renewable energy facilities. Each sector of this generation system affects local communities and the natural environment. Information and findings from the Environmental Performance Report will be used to formulate energy policy recommendations in the 2005 Energy Report. (Attachment A contains a summary of the issues for analysis. For a link to the 2003 Environmental Performance Report, see <a href="http://www.energy.ca.gov/reports/2003/0807\_100-03-010PDF">http://www.energy.ca.gov/reports/2003/0807\_100-03-010PDF</a>).

Please note that other workshops and reports are being prepared on a series of environmental topics for the *2005 Energy Report*, including climate change effects, water and energy use, cross-border energy issues, and petroleum infrastructure environmental performance.

#### **Questions for Workshop Participants**

The staff has prepared a series of questions for workshop participants on scoping and data collection (see Attachment B). These questions relate to several key issues that the Committee will need to address before establishing final data submission requirements and schedules. The Committee also invites stakeholders to comment on the appropriate methods and analyses needed to prepare the *Environmental Performance Report*.

#### Proposed Forms and Instructions for Environmental Data Collection

The 2003 Environmental Performance Report found that the "lack of environmental data hinders the Energy Commission's ability to report fully on the environmental performance and trends of the state's electrical generation and transmission system." The staff found that publicly available data from other agencies is not sufficient to evaluate the environmental performance of California's electricity system completely.

The staff has developed a set of forms and instructions for collecting targeted environmental data. A summary of these data request forms is contained in Attachment C. The draft forms will be discussed at the workshop and can be downloaded from the Commission's website: [www.energy.ca.gov/2005\_energypolicy/notices/index.html].

#### **Written Comments**

The Committee encourages stakeholders to submit written comments on the staff's proposed scope of work for the *Environmental Performance Report*, the workshop questions, and the proposed forms and instructions. Written comments should be submitted by **November 10, 2004**. Written comments may also be submitted at the workshop, and interested parties will have the opportunity to submit reply comments until close of business **November 29, 2004**.

Interested parties may file a single copy of comments electronically with the Docket Unit and follow up with an original copy by mail. The Energy Commission encourages comments by e-mail so that they may be posted on the Energy Commission's Energy Report proceeding website. Please include your name or organization's name in the name of the file. If you cannot send comments by e-mail, please provide an original and 12 copies by mail or in person to the Energy Commission's Docket Unit. All written materials filed with the Docket Unit will become part of the public record in this proceeding.

If filing comments by e-mail, please send one e-mail to <a href="mailto:docket@energy.state.ca.us">docket@energy.state.ca.us</a> with "04-IEP-01 – November 15 workshop" as the subject line and follow up with one original copy to the address below. Otherwise, please send or deliver written materials (original and 12 copies) to:

California Energy Commission
Re: Docket No. 04-IEP-01 –November 15 workshop
Docket Unit, MS-4
1516 Ninth Street
Sacramento, CA 95814-5504

#### **Public Participation**

The Energy Commission's Public Adviser, Margret J. Kim, provides the public with assistance in participating in Energy Commission activities. If you would like information on how to participate in this workshop, please contact the Public Adviser's Office by phone at (916) 654-4489 or toll-free at (800) 822-6228, by FAX at (916) 654-4493, or by e-mail at <a href="mailto:pao@energy.state.ca.us">pao@energy.state.ca.us</a>. If you have a disability and require assistance to participate in this workshop, please contact Lou Quiroz at (916) 654-5146 at least five days in advance.

Questions relating to the *Environmental Performance Report* should be directed to Project Manager Jim McKinney of the Systems Assessment and Facilities Siting Division at (916) 654-3999 or by e-mail at [jmckinne@energy.state.ca.us]. Technical questions on the proposed *Forms and Instructions* should be directed to Natasha Nelson of the Systems Assessment and Facilities Siting Division at (916) 654-6960 or by email at [nnelson@energy.state.ca.us]. Please contact Natasha Nelson for a hard copy of the forms and instructions. News media inquiries should be directed to Claudia Chandler, Assistant Executive Director, at (916) 654-4989 or by email at [mediaoffice@energy.state.ca.us].

JOHN L'GEESMAN

Commissioner and Presiding Member 2005 Integrated Energy Policy Report Committee JAMÉS D. BOYD

Commissioner and Associate Member 2005 Integrated Energy Policy Report Committee

Mail Lists: e-mail server list for Energy Policy, e-mail server list for Electricity, e-mail server list for Siting, e-mail list created for Hydro Day and Air Day

#### ATTACHMENT A

## **SUMMARY OF STAFF'S PROPOSED WORKPLAN 2005 Electricity Environmental Performance Report**

Attachment A covers the staff's proposed work plan for the *2005 Environmental Performance Report*, summarizing the elements of the report and special focus topics.

#### Status and Trends Elements

- System-Level Status and Trends: The staff will report on the status, trends, and key environmental issues concerning California's power generation and transmission systems, similar to the assessments in the 2001 and 2003 Environmental Performance Reports.
- Regional and Sector Assessments: The staff will assess trends and issues from a regional perspective to determine if impacts vary by air basins, watersheds, ecosystems or communities. The staff will investigate sub-elements of various power generation sectors (e.g., combined cycle, single cycle and steam boiler natural gas power plants) to asses difference in environmental performance and efficiency.
- Power Imports: The staff will develop environmental profiles of electricity generated in other states and countries for import into California.

#### Special Focus Topics

- 1. Environmental Justice and Community Concerns: What are the contributions of air emissions from the power generation sector on air quality in low income and minority communities? What are the trends in population near energy facilities?
- 2. Climate Change Effects on Hydropower Generation: What are the anticipated impacts of changing weather patterns on hydropower generation in California, the Pacific Northwest, and Colorado Basin?
- 3. Hydropower Energy and Environment Issues: The staff will continue to assess impacts to inland aquatic ecosystems from California's 14,000 MW hydropower generation system and investigate issues associated with the Federal Energy Regulatory Commission's (FERC) relicensing of 5,000 MW of hydropower.
- **4. Once-Through Cooling:** The staff will further assess impacts to coastal marine ecosystems from once-through cooling associated with 23,000 MW of natural gas and nuclear power plants.
- **5. Avian Mortality**: The staff will continue to investigate bird interactions with wind developments and bird collisions and electrocutions with transmission and distribution lines.
- **6. Policy Reviews**: How effective are the Energy Commission policies for greenhouse gas emissions, fresh water use, and hydropower impacts which were established in the 2003 *Energy Report?*

#### ATTACHMENT B

# 2005 Energy Report Environmental Performance Report Issues and Questions Energy Commission Staff 11/15/2004

Attachment B provides more information on the status and trends assessments and environmental data requests that the staff proposes for the *2003 Environmental Performance Report*, and provides a series of questions and discussion topics for the November 15 workshop.

Power generation can be a significant determinant of environmental quality and can be a significant public health issue. All sectors of California's power generation and transmission system impact aspects of California's air, water, ecosystems, and community resources. Information on the environmental status, trends and key issues associated with power generation and transmission is needed to develop informed energy policies. The *Energy Report*, and its supporting *Environmental Performance Report*, required by Senate Bill 1389 (Chapter 568, Statutes of 2002; Bowen), serves as the foundation for the development of well-designed state energy policy.

#### **Staff Questions and Proposed Issue Areas**

Staff proposes to investigate and answer the following questions related to the status and trends of California's 60,000 MW power generation system:

- 1. What are the status, trends and key environmental issues associated with California's power generation and transmission systems from a state-wide perspective?
- 2. What are the trends for each environmental media and community resource: air emissions, water use, water quality, terrestrial biology, aquatic biology, land use, environmental justice, and socioeconomics?
- 3. What are the trends and issues from a regional perspective? Are power generation and transmission impacts more severe in different air basins, watersheds, or ecosystems than on a state-wide basis?
- 4. What are the trends for each of the key sectors: natural gas, nuclear, hydro, coal, renewables, and transmission?
- 5. What are the trends within sectors: e.g., simple cycle versus combined cycle versus steam natural gas plants? Storage versus run of river hydro? Wind versus geothermal versus biomass renewables plants?
- 6. What are the environmental trends and issues associated with renewable generation facilities? Does our current definition of "clean energy" accurately portray environmental effects in the renewables sector?

7. What are the environmental trends and issues of the electricity generated in other states and countries that is imported into California (about 20 percent of total sales)?

#### **Questions to Agencies, Energy Producers, and Stakeholders**

- 1. What are your views on staff's proposed list of issues and questions?
- 2. What are your recommendations for priority areas and issues for the 2005 *Environmental Performance Report?*
- 3. What are your recommendations for changes or modifications in the way issues and trends are analyzed?
- 4. How has your organization used information from the previous 2001 and 2003 Environmental Performance Reports?

#### Forms and Instructions for Environmental Data Collection

To establish a solid analytical basis for the 2005 Environmental Performance Report, the Committee intends to require submission of data from several primary sources including electric utilities, merchant power plant owners, and other market participants. This information will supplement the large environmental data sets available from other environmental regulatory agencies and the data that the staff compiles during the course of Energy Commission regulatory and analytic work.

The following questions are provided to focus discussion at the workshop on key issues that the Committee will need to address before establishing final data submission requirements and schedules. The Committee also invites parties to comment on the appropriate methods to analyze the data.

#### A. Data Collection and Review Issues

- 1. The staff's proposal would require many privately-owned merchant plants and public municipalities to provide information on the operation of their power plants over the previous year, and in the case of hydropower, for several years into the past. Is this information available and how long will it take to provide it?
- 2. The staff proposes a 60-day response time for the return of environmental data to allow sufficient time to integrate the responses into the analyses for the 2005 Environmental Performance Report. Are there logistical or technical issues associated with this proposed response time?
- 3. For each form, a unique set of electrical generation owners and operators is selected to respond. Are there any suggested changes? Please provide your reasons for any changes.

## ATTACHMENT C Summary of Environmental Performance Report Forms and Instructions

This table provides a summary of the data requests contained in the Forms and Instructions package.

Form ID and Description	Who must file?	Summary of Form's Purpose
CEC 1001: Power Plant Identification and Physical Location	All generators	This information will be used to update and confirm basic plant identification, ownership, and location information.
CEC 1002, 1003, and 1004: Reporting of Criteria and Non- criteria Emissions (Including CO <sub>2</sub> ) CEC 1005: Classification of	All generators ≥ 1MW, excluding solar PV and wind All generators	These forms provide the emission factors of criteria and non-criteria emissions from source tests or monitoring, which staff will use in conjunction with currently available data.  These forms request information regarding
Power Plant Cooling Technology	> 20MW	power plant cooling technology. This information will allow staff to monitor trends in cooling technology for correlation with water conservation.
CEC 1006: Monthly Water Volume(s) of Water Used by Power Plants	All generators > 20MW	These forms request information regarding the volume of water use (other than for oncethrough cooling) in power plants and the source of that water. This information will allow staff to monitor trends in water use and source and how energy related water use fits with statewide water demand and how it is effected by periodic drought conditions.
CEC 1007: Classification of Wastewater Disposal Method and Quantity Discharged	All generators > 20MW	These forms request information regarding power plant wastewater disposal method(s). This information will allow staff to monitor trends in wastewater disposal for correlation with water conservation and water quality issues, and be able to compare the effectiveness and costs of various methods.
CEC 1008: Hydroelectric Project and Powerhouse Questionnaire	All generators ≥ 1MW that are hydropower	These forms provide information on the locations and basic hydrology of California's hydroelectric system. With this initial information, staff intends to create a foundational assessment to which additional environmental information can be added over time.
CEC 1009: Socioeconomic Benefits of Electrical Generation Facilities	All generators ≥ 1MW	The collection of basic socioeconomic data for electric generation facilities will enable Energy Commission staff to show the economic benefits (and potential loss) from the operation or closure of electric generation facility types in all sectors.